

SEQUENCE LISTING

<110> FOTI, MARIA
LOHMER, STEFAN

<120> PHOTOPROTEIN WITH IMPROVED BIOLUMINESCENCE

<130> 100506-00025

<140> 10/530,658

<141> 2005-04-07

<150> PCT/EP03/011626

<151> 2003-10-21

<150> EP 02023452.2

<151> 2002-10-21

<160> 9

<170> PatentIn Ver. 3.3

<210> 1

<211> 662

<212> DNA

<213> Obelia longissima

<400> 1

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tgaaattgtg tccaaggcat ctgatgacat atgtgccaag ctggaagcca caccagaaca 240
aacaacacgc catcaagttt gtgttgaagc tttctttaga ggatgtggaa tggaatatgg 300
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caagaaatgg gcaagaaacg aacctactct cattcgtgaa tggggagatg ctgtctttga 420
tattttcgac aaagatggaa gtggtacaat cactttggac gaatggaaag cttatggaaa 480
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ggacaacagt ggtgaccttg atgttgacga gatgacaaga caacatcttg gattctggta 600
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<210> 2

<211> 195

<212> PRT

<213> Obelia longissima

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Arg Trp Ile Lys Arg His Lys His Met Phe Asp Phe Leu Asp Ile Asn
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Gly Asn Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys Ala Ser Asp
      35              40              45
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Asp Ile Cys Ala Lys Leu Glu Ala Thr Pro Glu Gln Thr Lys Arg His
 50 55 60
 Gln Val Cys Val Glu Ala Phe Phe Arg Gly Cys Gly Met Glu Tyr Gly
 65 70 75 80
 Lys Glu Ile Ala Phe Pro Gln Phe Leu Asp Gly Trp Lys Gln Leu Ala
 85 90 95
 Thr Ser Glu Leu Lys Lys Trp Ala Arg Asn Glu Pro Thr Leu Ile Arg
 100 105 110
 Glu Trp Gly Asp Ala Val Phe Asp Ile Phe Asp Lys Asp Gly Ser Gly
 115 120 125
 Thr Ile Thr Leu Asp Glu Trp Lys Ala Tyr Gly Lys Ile Ser Gly Ile
 130 135 140
 Ser Pro Ser Gln Glu Asp Cys Glu Ala Thr Phe Arg His Cys Asp Leu
 145 150 155 160
 Asp Asn Ser Gly Asp Leu Asp Val Asp Glu Met Thr Arg Gln His Leu
 165 170 175
 Gly Phe Trp Tyr Thr Leu Asp Pro Glu Ala Asp Gly Leu Tyr Gly Asn
 180 185 190
 Gly Val Pro
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<210> 3

<211> 195

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
chimeric protein

<400> 3

Met Ser Ser Lys Tyr Ala Val Lys Leu Lys Thr Asp Phe Asp Asn Pro
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 Gly Asn Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys Ala Ser Asp
 35 40 45
 Asp Ile Cys Ala Lys Leu Gly Ala Thr Pro Glu Gln Thr Lys Arg His
 50 55 60
 Gln Asp Ala Val Glu Ala Phe Phe Lys Lys Ile Gly Met Asp Tyr Gly
 65 70 75 80
 Lys Glu Val Glu Phe Pro Ala Phe Val Asp Gly Trp Lys Glu Leu Ala
 85 90 95

Thr Ser Glu Leu Lys Lys Trp Ala Arg Asn Glu Pro Thr Leu Ile Arg
 100 105 110

Glu Trp Gly Asp Ala Val Phe Asp Ile Phe Asp Lys Asp Gly Ser Gly
 115 120 125

Thr Ile Thr Leu Asp Glu Trp Lys Ala Tyr Gly Lys Ile Ser Gly Ile
 130 135 140

Ser Pro Ser Gln Glu Asp Cys Glu Ala Thr Phe Arg His Cys Asp Leu
 145 150 155 160

Asp Asn Ser Gly Asp Leu Asp Val Asp Glu Met Thr Arg Gln His Leu
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Gly Phe Trp Tyr Thr Leu Asp Pro Glu Ala Asp Gly Leu Tyr Gly Asn
 180 185 190

Gly Val Pro
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<210> 4
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 <212> DNA
 <213> Artificial Sequence

<220>
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 atcaccctcg atgaaattgt gtccaaggca tctgatgaca tatgcgccaa acttggagca 180
 acaccagaac agaccaaagc tcaccaggat gctgtcgaag ctttcttcaa aaagattggg 240
 atggattatg gtaaagaagt cgaattccca gcttttggtg atggatggaa agaattggcg 300
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 gctgtctttg atattttcga caaagatgga agtggtaaaa tcactttgga cgaatggaaa 420
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 cattgcgatt tggacaacag tggtagacct gatgttgacg agatgacaag acaacatctt 540
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<210> 5
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
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 atcaccctcg atgaaattgt gtccaaggca tctgatgaca tctgcgccaa actgggagca 180

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acaccagaac agaccaaacy gcaccaggat gctgtcgaag ctttcttcaa aaagattgggt 240
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acttcagaac tcaagaaatg ggcaagaaac gaacctactc tcattcgtga atggggagat 360
gctgtctttg atattttcga caaagatgga agtgggtacaa tcactttgga cgaatggaaa 420
gcttatggaa aaatctctgg tatctctcca tcacaagaag attgtgaagc gacatttcga 480
cattgcgac tggacaacag tggcgacctg gatgttgact agatgacaag acaacatctt 540
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gaattcc 607

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<210> 6
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<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
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ctttcttcaa 70

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<210> 7
<211> 71
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      primer

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agtttgccgc a 71

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<210> 8
<211> 62
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 8
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ag 62

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<210> 9
<211> 63
<212> DNA
<213> Artificial Sequence

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<220>

<223> Description of Artificial Sequence: Synthetic
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<400> 9

aattctttcc atccatcaac aaaagctggg aattcgactt ctttaccata atccatacca 60
atc 63